

RESPONSES OF YOUNG INDIANS TO RAGAS

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Introduction

Emergence of new types of youth music groups in industrial countries is a *fait social*. This has made it possible for scholars to highlight certain issues connected with new patterns of musical behaviour in the younger generation. For example, it has been felt that (i) a thorough understanding of these new types of musical activities will be necessary if cultural and educational policies in industrial societies are to become more effective, (ii) attempts at devising cultural programmes for the younger generation will have to make allowance for the fact that many teenagers are seeking and finding new ways of expressing themselves musically, and (iii) music educators stand in need of assessing the importance of these new patterns of behaviour. While highlighting the issues, it is not suggested that the new patterns should be over-estimated in the sense that these will replace the more traditional patterns. The conclusion is that we are 'confronted' with the new types of music behaviour and these patterns have emerged under the influence of the technical media of mass communication and also as a result of the 'intrusion' of modern technology into the field of music (Blaukopf, 1971).

The present investigators wish to endorse much of what has been concluded above regarding the younger generation's new ways of expressing themselves musically, but wish to emphasise that policies are being framed half-heartedly after listening to half the story covering *aesthetic expression* of the generation in question; the other half — perhaps the better half — lies in the domain of their *aesthetic experience*. There is a need to find out as to how the younger generation feels while listening to the traditional patterns of music. If we find that, under the skin, today's youth reacts, feels or experiences the same types of emotions while listening to classical music, as a respondent from an older generation will experience, then there is a need to give a second thought to the question of framing policies. For, it will show that the effects of emergence of new patterns of music behaviour, as noted through expressive behaviour, are not deep-rooted enough to undermine

effects associated with the feelings aroused by classical music. It is perhaps a case of intrusion of an adolescent for being socialised in the mature world of adult music society and the confrontation in question should be taken in that spirit.

The investigators also wish to put on record their view that as analysis of deeper issues involved in the subject will offer more stable answers to problems of the type mentioned above, such empirical analysis and studies by research communities of various cultures deserve more attention and need to be replicated suitably in cross-cultural environs before taking the evidence as conclusive.

Aesthetics in Social Sciences

Schematic ideas regarding aesthetic expression *vis-a-vis* aesthetic experience will be vindicated if the division of the subject matter of aesthetics in social sciences given in Figure I below is taken as a guide. The present paper reports a study in the area of effects of the artistic experience. Once a person has to some degree apprehended a work of art, his experience may effect him further. It is often claimed that artistic experience has broad general influence on understanding, morality, etc. This influence perhaps is what

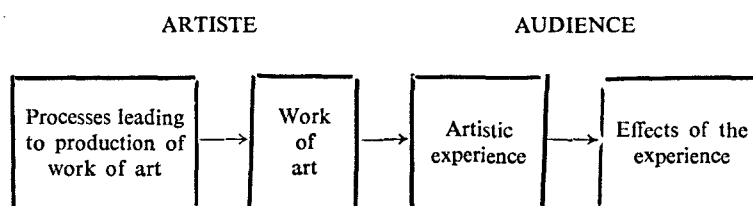


Figure 1: Schematic representation of the subject matter of aesthetics (Adapted from Child, 1969).

would be most valuable to know about. The effects psychology has thus far studied, however, are mostly limited to the individual's direct relation to the work of art. For example, will experiencing a particular work lead a person to seek further opportunity to enjoy it, or will he henceforth avoid it? Will he judge it to be good or bad art? What is responsible for the varying responses of a person to different works or aspects of them, or differing responses of several people to the same work?

With what has been given above as the preamble, the details of the psychological 'experiment' testing the responses of young Indians to *ragas* in Indian classical music follow.

THE EXPERIMENT

Background

The study being described was part of an elaborate research programme on the subject of psychological response to *ragas* of Indian classical music at the Laboratories of the Sangeet Natak Akademi, New Delhi. The chief aim of these researches was to make a comparison of the mood 'created' with the mood 'intended' by music.

In the first study of the series (Deva and Virmani, 1968) an effort was made to quantify feelings aroused in Indian listeners by classical Indian musical (Hindustani) excerpts. The technique employed for quantifying the nature of moods aroused by musical samples was that of semantic differential (Osgood, Suci and Tannenbaum, 1957). The experiment was planned only to exemplify a methodology currently in use in the behavioural sciences for measuring the psychological meaning, that is : the moods aroused, by the musical compositions or excerpts of *ragas*, as concepts.

In the experiment, four musical excerpts namely, *ragas Kafi, Misra Mand, Pooriya Dhanasri* and *Ragesri* obtained from the recordings of the performance of Ravi Shanker on the *sitar*, only the *alap* portion, were played to 37 respondents. These included both males and females in the age range of twenty to thirty years, untrained in classical music. They noted their responses on a specially designed twentytwo bipolar adjective semantic differential scales which were later on subjected to a multivariate statistical analysis. In this analysis a comparison of the mood 'created' with the mood 'intended' by the musical compositions was made. The results of analysis showed similarity between the two moods. For example, the *intended* mood of *Kafi raga* depicting gaiety, romance and pleasantness etc., was found (from their responses) to have been *created* on the respondents a mood of joyfulness, refreshing, colourful, active, etc.

The above experiment no doubt, proved useful in that it initiated an inter-disciplinary approach to some outstanding issues in music. Yet it had certain limitations like a small sample size of respondents. Further, the adjective scales chosen for the semantic differential technique used were taken from the work of American investigators (Keil and Keil, 1967). In such a case the possibility of having used adjectives which were only partially appropriate for Indian *ragas* and Indian respondents could not be ruled out. The second study of the series was undertaken to avoid these limitations to some extent. Besides this, the scope of the experiment was further enlarged to examine whether respondents associated any specific colour, season and time of the day, with a *raga* (synesthetic basis of India music theory). Efforts were also made herein to study the meaning of music in relation to certain bio-data of the respondents like their sex, educational qualification, age

and training in classical music. Complete details of these experiments will become available later. A limited but self contained portion of this is being presented in the form of the present paper with its scope delimited as under:

- (i) To study whether there was any resemblance between the *intended* mood of a *raga*, as traditionally associated with it, down the ages, by musicologists, musicians and connoisseurs with the mood *created* on respondents from 'younger' and 'older' generations in terms of psychological responses, while listening to music, and,
- (ii) to compare the mood created on the 'younger' generation with that created on the 'older' generation.

Research Plan

The research findings are based on the responses of 228 individuals. Out of these 228 respondents 141 belonged to the 'older' generation (age ranging from 20 years to 40 years), both males and females, having different types of educational background and varied training in classical music. Necessary further briefings on the plan of research as are relevant to the paper, follow.

Sample

The 228 individuals belonged to a few schools/colleges (both teacher and taught) of New Delhi. These persons participated in the experiment in six batches during January/February, 1973. Details of personal information concerning these respondents in respect of their sex, educational background, age and training in classical music are given in Table 1.

TABLE 1
Information regarding bio-data variables of respondents

Information regarding the data variables of respondents					
Variable	Number of persons in various sub-categories				Total
Sex	Males		Females		228
	121		107		
Educational background	Pre-Higher secondary	Under-graduate	Graduate and above		228
	137	18	73		
Age	Approaching 20	20—29	30—39	40—	228
	141	63	10	14	
Training in Classical music	Untrained	Listening training	Practical training without degree	Degree holders classical music	228
	59	84	51	34	

A few points about the composition of the sample may be noted. Data of Table 1 show that in respect of sex, both males and females were almost equally represented. For the variable of educational background as also of age, two distinct groups were available as a natural consequence of the age factor; pre-higher secondary and graduates etc., were the two groups for educational background in close parallel to the two groups for age. The over-emphasis on the above groups in educational background due to a grouping in age was an 'unavoidable' part of the design of data collection; in the elaborate research study, it was proposed to separately compare the listening experience of the educational sub-groups of the sample. On the variable of training in classical music, it can be seen from the data that, more or less, all the four groups are sufficiently represented.

The schools chosen for the adolescents' sample were English medium ones. Introduction of such a limitation in the sample of respondents was intentional. The measurement technique used required those sufficiently literate in the English language. Hence the choice.

Stimulus

Bhairav raga was used as the stimulus. A *raga* is a melodic seed idea, having the following dimensions and limitations. It is defined by a definite set of notes, syntax or order of rendering the notes, characteristic phraseology, stasis on note and characteristic ornamentation. It is usual to associate a *raga* with a watch of the day and a season. Indian music has nearly 500 *ragas* included in the two systems—northern and southern (Deva, 1974).

It is very important to stress at the outset that a *raga* is a statistically structured stimulus (Deva, 1967; Deva & Nair, 1966). As such, even its internal components (notes, temporal proportions, and so on) are variable within certain limits. It is quite possible that there might be differences in the response to *alap*, *jode*, *tanam*, *gat*, fast passages, octave differences, songs, nature of instruments and many more such factors. These are not, however, determinants of *raga* structure. In any case, a very extensive and intensive research is necessary for studying the effect of these factors. The present study may be counted as an exploratory one as it uses only the *alap* portion.

Musical Excerpt used : Traditional profile :

Bhairav : is a major *raga* in North Indian Music parallel to *Mayamala-vagaula* of Karnatak (South Indian) Music.

<i>Ascent</i>	: Sa ri Ga Ma Pa dha Ni
	C Db E F G Ab B
<i>Descent</i>	: Sa Ni dha Pa Ma Ga ri
	C B Ab G F E Db

Emphatic notes	: <i>ri</i> and <i>dha</i> Db Ab
Characteristic Phrase	: Ga Ma Pa <i>dha</i> , Pa, Ga Ma <i>ri</i> — Sa E F G Ab, G E F Db C
Colour associated	: Usually described as an ascetic of <i>white body</i> covered with ashes and white garment.
Season associated	: Autumn
Time of the day associated	: Early morning.
Miscellany	: It is a <i>raga</i> of grave emotion. Said to suit <i>bhakti</i> and <i>santa</i> .
Stimulus	: Alap on <i>surbahar</i> by Surendranath Banerjee: nearly 2 minutes.

Semantic Differential

The technique employed for quantifying nature of moods aroused by musical excerpts was that of Osgood's 'semantic differential'. Semantic differential is a method of observing and measuring the psychological meaning of things, usually concepts (Kerlinger, 1964). Although everyone sees things a bit differently, sometimes very differently, *there must be some common disposition*, in all concepts (Deva, 1967). Indeed the definition of 'concept' makes this clear. Now, by using musical compositions or excerpts of *ragas* as 'concepts', we could measure their psychological meaning, that is, the moods aroused by these, with the help of this method.

Semantic Differential Scales

It consists of a number of 'scales'. Each of the scales is a bipolar adjective pair chosen from a large number of such scales for a particular research purpose. The individuals are asked to rate on these scales 'concepts' the meanings of which are being measured.

Adjective Pairs Chosen

Twentyseven adjective pairs were used. These 27 adjective pairs were framed on the basis of nine *rasas* of Indian aesthetic theory. As is known, the Indian theory of emotions (Hindu psychology) has been usually associated with art experience in the well-known theory of *rasa*. This psychology recognizes the role of nine *rasas* (best translated, for the present purpose, as 'aesthetic emotion'), namely, *sringara* (erotic), *hasya* (humorous), *karuna* (pathetic), *veera* (valourous), *raudra* (violent), *bhayanaka* (fearful), *veebhatsa* (odious), *adbhuta* (wonderous) and *santa* (peaceful) (Coomaraswamy, 1952). (We shall not enter into the controversy whether *santa* is a positive *rasa* or a negation of all emotions. Again 'erotic' may not be a proper equivalent to *sringara* which is more akin to 'romantic').

Procedure Adopted for Obtaining Adjective Pairs

Sanskrit words denoting the nine *rasas* were translated into their English equivalents with the help of Monier-Williams (1956) which in turn were matched for their bipolars from a *Standard Dictionary of the English language* (Webster, 1953) and the *Dictionary of Synonyms and Antonyms* (Funke and Wagnalls, 1947).

A few words must be said about these adjectives. *It is a drawback that we had to operate with English.* For (1) it does not give the finer nuances of the original Indian word and (2) one is not always very sure that the *experimenters* and the *subjects* are uniform or definite in their semantic absorption of the word in English. *Even the present choice of English words is not always satisfactory.* Eventually, researchers will have to devise strictly comparable adjectives in Indian languages.

Remarks on Adjective Scales

The numerous studies of semantic differential scales (employing different types of concepts and many different adjective pairs) performed on ratings made by researches in different countries around the world, lead to the conclusion that there are three major dimensions of meaning involved. These are, (1) 'evaluative' (good-bad, usually being the pivotal scale), (2) 'potency' (strong-weak) and (3) 'activity' (quick-slow); other dimensions as well may emerge. It is possible that the adjective pairs based on nine *rasas* may also ultimately reduce to these three or so dimensions. But this will require a separate empirical study and analysis.

Format and Administration

The format of the semantic differential scales etc., is given in Table 3 later. The way in which it was administered to the sample of respondents has been described under 'Experiment Proper'. The manner in which response is recorded on these scales by the respondents will become clear from the set of instructions given to them which follow.

Experiment Proper

The 228 respondents, usually made available as batches of 30-40 individuals, were seated comfortably in an auditorium. The instructions sheet, blanks of the format, one for each of the excerpts, as also personal data blanks were distributed among them. They were then asked to read the instructions with the experimenter who read them aloud. The marked examples of the instructions were also explained to the audience on a black-board. At this stage, it was enquired whether any one of them had any ques-

TABLE 2

Synonyms and antonyms of the nine rasas along with the final choice of bipolar adjective pairs selected to form the semantic differential scales

Rasa	Translation to English	Possible Synonyms/antonyms	Final Choice
<i>Srngara</i>	Erotic	Amorous Sexual/Frigid Passionate/Dispassionate	Passionate Dispassionate Sexual-Frigid
<i>Hasya</i>	Humorous	Playful Funny/Sober Humorous/Dull Amusing/Grave	Funny-Sober Humorous-Dull Amusing-Grave
<i>Karuna</i>	Pathetic	Sympathetic Merciful	Sympathetic- Unsympathetic Merciful-Merciless Pitiful-Pitiless
<i>Veera</i>	Valorous	Gallant, Courageous Strong Bold/Scared Brave Cowardly	Brave-Timid Cowardly-Valourous Bold-scared
<i>Raudra</i>	Violent	Furious/Calm	Calm-Furious Angry-Gentle Sane-Insane
<i>Bhayanaka</i>	Fearful	Fearing Horror (Horrible) Dreadful Frightening	Fearful-Fearless Frightened-Bold Dreadful-Dreadless
<i>Veebhatsa</i>	Disgusting	Agreeable/Disagreeable Hateful/Likable Attractive/Repulsive Hideous/Loathsome	Agreeable-Disagreeable Hateful-Likable Attractive-Repulsive
<i>Adbhuta</i>	Wonderous	Surprising/Unsurprising Usual Expected Supernatural	Usual-Unusual Expected-Unexpected Surprising-Unsurprising
<i>Santa</i>	Peaceful	Tranquil Undisturbed	Peaceful-Agitated Disturbed-Undisturbed
<i>Raga/Ragini</i>		Manly-Womanly Masculine-Feminine	

tions or doubts about using the format. The doubts were cleared by repeating the marked examples only; discussion was intentionally avoided.

Instructions

Please do not look at the following pages until instructed to do so.

One of the purposes of this study is to find the words that people use to best describe certain feelings or moods they have while listening to music. On the following page you will find a list of paired adjectives. Your task is to circle the ONE mark between EACH of these pairs that best describes the mood, feeling or atmosphere of the music you are listening to. *First* decide which word best describes the mood; second, quickly estimate the extent of intensity of the adjective you have selected.

Here is an example, already marked:

	1	2	3	4	5	6	7	
LARGE	.		.	.	.	.	⊙	SMALL
SAD	.	.	.	⊙	.	.	.	HAPPY
CALM	.	⊙	.	.	.	.	.	EXCITED
	Extremely	Quite	Slightly	Both or Neither	Slightly	Quite	Extremely	

(The middle dot should be circled when you feel that *both words* equally well describe the musical mood or when neither word feels right to you.)

Simply ask yourself as you listen to the piece of music, "What mood is being created?" We are not asking for mechanical descriptions. Just let your immediate feelings guide your marks. Try to *concentrate upon* the *overall feeling* of the music. Allow about two minutes for the page; work fairly fast. Do not look back or ship around. You must mark all 27 adjective pairs. You will be told to begin only after the music has been given few minutes to establish its mood.

When we say 'Listen', please listen to the music. Do not circle any mark. The music which will follow is for establishing the mood. When we say 'Mark', please start circling *the mark* which best describes your feelings.

Any questions?

Bio-data

1. Name :
2. Educational qualification :
3. Age :
4. Male or Female :
5. Do you play an instrument or sing? (circle one) If so, are you a *professional* or an *amateur*? (circle one).
6. Rank your preferences from 1 to 4 :
 - () Indian Film Music
 - () Western Film Music
 - () Indian "Classical"
 - () Western "Classical"
7. Any additional comments are welcome:

Table 3

Final Format of Semantic Differential Used

Describe the Mood of this Music									
PASSIONATE	O	0	o	.	o	0	O	DISPASSIONATE	
FUNNY	O	0	o	.	o	0	O	SOBER	
SYMPATHETIC	O	0	o	.	o	0	O	UNSYMPATHETIC	
CALM	O	0	o	.	o	0	O	FURIOUS	
BRAVE	O	0	o	.	o	0	O	TIMID	
FEARFUL	O	0	o	.	o	0	O	FEARLESS	
AGREEABLE	O	0	o	.	o	0	O	DISAGREEABLE	
USUAL	O	0	o	.	o	0	O	UNUSUAL	
AGITATED	O	0	o	.	o	0	O	PEACEFUL	
MANLY	O	0	o	.	o	0	O	WOMANLY	
HUMOUROUS	O	0	o	.	o	0	O	DULL	
MERCIFUL	O	0	o	.	o	0	O	MERCILESS	
ANGRY	O	0	o	.	o	0	O	GENTLE	
COWARDLY	O	0	o	.	o	0	O	VALLOUROUS	
FRIGHTENED	O	0	o	.	o	0	O	BOLD	
HATEFUL	O	0	o	.	o	0	O	LIKED	
EXPECTED	O	0	o	.	o	0	O	UNEXPECTED	
DISTURBED	O	0	o	.	o	0	O	UNDISTURBED	
SEXUAL	O	0	o	.	o	0	O	FRIGID	
AMUSING	O	0	o	.	o	0	O	GRAVE	
PITIFUL	O	0	o	.	o	0	O	PITILESS	
SANE	O	0	o	.	o	0	O	INSANE	
BOLD	O	0	o	.	o	0	O	SCARED	
DREADFUL	O	0	o	.	o	0	O	DREADLESS	
ATTRACTIVE	O	0	o	.	o	0	O	REPULSIVE	
SURPRISING	O	0	o	.	o	0	O	UNSURPRISING	
MASCULINE	O	0	o	.	o	0	O	FEMININE	
	Extremely	Quite	Slightly	Both or Neither	Slightly	Quite	Extremely		

After having confirmed that the instructions were clear to the respondents, they were, through a tape-recorder, given two minutes of music, *Bhairav raga* excerpt, to establish their mood, after which they were requested to get ready for marking. *Bhairav raga* excerpt was repeated for two minutes and they were asked to record their impressions on the format during the replay.

The time limits were strictly adhered to and all extraneous disturbances were meticulously kept under control during the experiment proper.

Bio-data sheets were got filled by the respondents and the end of the experiments.

Scoring Procedure:

The conversions of adjective choices of a sample of respondents into quantitative terms was the next step. The following illustration, wherein we have taken the case of 'Sad-Happy' polarised adjective, makes quantizing or metrization clear.

<i>Adjective</i>	<i>Scoring weight</i>
SAD	
... extremely	1
... quite	2
... slightly	3
... both or neither	4
... slightly	5
... quite	6
... extremely	7
HAPPY	

In terms of the above illustration, scoring for the example already marked in the 'Instructions' will be, for Large-Small, 5; for Sad-Happy, 3; for Calm-Excited, 1. Scoring on similar lines, the basic quality of an individual's musical experience could be obtained on all the adjectives and on any 'concept' (*raga*) in quantitative terms. Once this was obtained, we could determine averages and measures of relationships between various adjectives through statistical methods, so as to form an idea of the group's musical experience which represented *culturally determined common denominators of meaning*.

The nature of such statistical analysis is being briefly covered in the next section.

Method of Analysis

In this sections we will introduce briefly the statistical method of factor analysis which is basic to this study of meaning of music. (Virmani, 1969).

Factor Analysis

Factor analysis is a multivariate statistical method of reducing a 'large' number of *empirical indicators* (in the present case, 27 adjective scales) to a 'small' number of conceptual variables known as factors (basic dimensions). Factors yielded by the statistical analysis are meant to convey all the essential information for an original set of, say, n variables into some m components, such that m is almost always less than n . Thus, the chief aim is to attain scientific economy of description. In other words, the purpose is to measure, objectively, the 'core' of some indicators: in the present case, polarised adjective scales ($n=27$). *This does not mean that factor analysis discovers the 'fundamental', since one gets out of this analysis only what one puts into it. Unless the indicators being analysed do not exhaustively describe the situation, the 'core' of that situation could not be called 'fundamental'.* Nevertheless, in an experiment with n greater than twenty or so the 'core' does have appreciable practical utility.

The end product of these solutions, generally, are not acceptable to psychologists, although, some prefer the 'principal factor' solution. In search of 'meaning-ful' factors, psychologists have introduced various theories in the hope of arriving at a form of solution which would be unique and apply equally well to any branch of human knowledge other than their own.

One of these methods is referred to as varimax method. This method of rotation, being more robust, was preferred for the present study.

In concluding factor analysis, it may be mentioned that both rotated and unrotated factor loadings will be taken into account while interpreting the results.

Styles of Presentation of Results

Style of presentation of results on meaning of music needs certain further elaboration. Three major aspects will be covered under these results. They are, first, 'Table of means of scores of the individuals on bipolar adjectives' for the excerpt; secondly, the Profile for the excerpt; thirdly. Table of Dimensions of Meaning as extracted by factor analysis for the excerpt. A brief description of these modes of presenting data follows.

1. Table of Means of Scores of the Individuals of Bipolar Adjectives

This table for the excerpt consists simply of the means of response of the participants on each of the bipolar adjective scales. The means represent in quantitative terms the basic quality of the group's musical experience. Further, it also enables us to derive plus or minus sign following the dimension 'label' (under Table of Dimension of Meaning) pointing to the pole of the dimension that seems to have been emphasized by the respondents; means below or above the mid-point, a score of 4, (neither, or both), given an idea of the groups' leaning towards one pole or the other of the given bipolar scale.

These results for *Bhairav* in terms of the responses recorded by the two groups Younger and Older Generation are given in Table 4.

TABLE 4

BHAIRAV: Table of Means of 131 respondents from Younger and 87 respondents from Older generations.

S. No.	Bipolar adjective	Younger generation Mean	Older generation Mean
1.	Passionate-Dispassionate	3.8	3.6
2.	Funny-Sober	5.2	5.7
3.	Sympathetic-Unsympathetic	2.9	2.6
4.	Calm-Furious	2.3	2.3
5.	Brave-Timid	4.5	4.1
6.	Fearful-Fearless	4.6	4.4
7.	Agreeable-Disagreeable	3.4	3.0
8.	Usual-Unusual	3.5	3.1
9.	Agitated-Peaceful	5.6	4.8
10.	Manly-Womanly	3.6	3.7
11.	Humourous-Dull	4.3	4.3
12.	Merciful-Merciless	2.7	2.9
13.	Angry-Gentle	5.3	5.3
14.	Cowardly-Valourous	4.2	4.2
15.	Frightened-Bold	4.2	4.2
16.	Hateful-Liked	5.0	5.1
17.	Expected-Unexpected	3.6	3.5
18.	Disturbed-Undisturbed	4.3	3.8
19.	Sexual-Frigid	4.4	4.2
20.	Amusing-Grave	4.6	4.3
21.	Pitiful-Pitiless	2.3	2.8
22.	Sane-Insane	3.7	3.3
23.	Bold-Scared	3.8	4.2
24.	Dreadful-Dreadless	4.2	4.0
25.	Attractive-Repulsive	3.4	3.0
26.	Surprising-Unsurprising	4.2	4.2
27.	Masculine-Feminine	3.6	4.1

2. Profile

The profile is simply a graphical way of presenting the means given in the 'Table of means of scores of the individuals on bipolar adjectives' discussed above. It presents through a visual medium, the basic quality of the groups' musical experience, etc., referred to.

The profile of *Bhairav* for Younger and Older Generations, based on the means is given in Figure 2.

3. Dimensions of Meaning

Table of Dimensions of Meaning represent the final stage of presenting data about meaning of music. It is at this stage that the factors are 'named' by taking into consideration their weights on different bipolar scales on which they are appreciably loaded (first six or so). After naming, the meaning of a particular excerpt of music in terms of the mood aroused in the respondents can be discussed.

Dimensions of Meaning for *Bhairav* for Younger and Older Generations are given in Tables 5 and 6 respectively.

4. Computer Processing of Results

Before giving the above results and their interpretation it is considered useful to mention that the above analysis was performed on IBM System 360 at the Delhi University Computer Centre, Delhi. Part of this work was also completed at the DCM Computer Centre, Delhi. While efforts have been made to check and recheck the results processed by the computers (some results were processed twice) the question of the need for verification, if felt by any researcher, is kept open. To that extent, the results can be 'transcended'. In any case, the methodology stands exemplified.

Interpretation of Results : Conclusions

Resemblance between intended mood of Bhairav and the mood created on respondents from Younger and Older generations.

Table 7 gives a comparative picture of the findings of the study in terms of its aims. Included in the table are (i) intended mood of the *raga Bhairav* traditionally associated with it, down the ages, by connoisseurs, (ii) mood created on younger generation, (iii) mood created on Older generation and (iv) mood created on all the 288 respondents after pooling the data of 141 younger and 87 older individuals, which picture has been reported by the investigators through another study (Deva & Virmani, 1974). Created moods

on younger and older generation in item (ii) and (iii) above are the summing up of the results given in Tables 5 and 6.

INFERENCE

The results of the experiments and the analysis thereof lead us to certain interesting, if not extraordinary, inferences.

(i) It is first necessary to compare the traditionally intended mood and the mood of the *raga* as reported by the respondents (total pooled). One here sees a great degree of commonness between the two. While the traditional mood gives the *raga* awesomeness, grandeur, boldness, softened by a feeling of melancholy and tenderness, the current response to this *raga* emphasised on the positive vitality, courage, but yet compassion. In general, therefore, the two profiles are significantly similar.

(ii) A commonness in the responses of the younger and the older generations is clearly revealed. The old generation feels the *raga Bhairav* has an expression of detachment and boldness. The younger generation also describes the *raga* as somber but yet merciful in its grandeur. Once again we see that essentially the mood by the *raga* evoked has no generation gap.

In the face of the above two inferences we have to ask ourselves a question on the very nature of classical music, if not classicism in art. At least in the case of *Bhairav raga* one could very well say that there has been no significant change in its ethos either during the centuries or between generations. The only inference that is logical, therefore, is that the *Bhairav* emotion emerges from the deeper psyche of the Indian mind, which fact is revealed by a lack of deviation from the traditional mood. Here we have a musical seed which is still there in the psyche of this society and if properly cultured can yet appeal to the old and the young. The opinion often expressed that the younger generation is not very responsive to classical music may therefore have no foundation. Certainly the younger generation searches for new forms and in this search there will always be experimentation and deviation from tradition. The musical forms so created by the younger generation will pass into the collective psyche if it has touched that level, like the classical music of this country. Music whether of the *raga* system or otherwise which, in the course of time, does not delve into the abiding depth will be washed away in the currents of time. Often the younger generation does not respond to classical music not because of any aesthetic distinction but perhaps due to the excessive indulgence in grammatization by classical musicians.

If therefore a suitable policy for the musical activity of a society has to be formed it is very necessary to think again of the lasting values of classical art and to bring them to those who may be shying away from it.

TABLE 5
BHAIKAV : Dimensions of Meaning of Younger generation

Factor	UNROTATED	ROTATED
I	CALM-FURIOUS Undisturbed-disturbed Usual-unusual Sober-funny (Agreeable-disagreeable)	VALOUROUS-COWARDLY Clam-furious Undisturbed-disturbed Grave-amusing
II	PASSIONATE-DISPASSIONATE Dull-humorous (Agreeable-disagreeable) (Undisturbed-disturbed) (Pitiful-pitiless)	DULL-HUMOUROUS Passionate-dispassionate Merciful-merciless Calm-furious Pitiful-pitiless Bold-frightened Dreadless-dreadful
III	PASSIONATE-DISPASSIONATE Agreeable-disagreeable Bold-frightened (Calm-furious) (Gentle-angry) (Peaceful-agitated) (Timid-brave)	MERCIFUL-MERCILESS Pitiful-pitiless Dull-humorous
IV	PASSIONATE-DISPASSIONATE Bold-frightened Expected-unexpected (Peaceful-agitated) (Gentle-angry) (Undisturbed-disturbed) (Sympathetic-unsympathetic)	PITIFUL-PITILESS Merciful-merciless Passionate-dispassionate Dull-humorous Grave-amusing
V	FEARLESS-FEARFUL Agreeable-disagreeable Timid-brave (Gentle-angry) (Sober-funny) (Undisturbed-disturbed)	FRIGID-SEXUAL Sympathetic-unsympathetic Fearless-fearful
VI	DULL-HUMOUROUS Peaceful-agitated Linked-hateful Merciful-merciless	LIKED-HATEFUL

TABLE 6

BHAIRAV : Dimensions of Meaning of Older generation

Factor	UNROTATED	ROTATED
I	SOBER-FUNNY Sympathetic-unsympathetic Timid-brave (Usual-unusual) (Pitiful-pitiless)	FRIGID-SEXUAL Merciful-merciless Sympathetic-unsympathetic Bold-frightened Grave-amusing Scared-bold disturbed-undisturbed
II	CALM-AGITATED Passionate-dispassionate Timid-brave (Fearless-fearful)	Neither-DREADFUL-DREADLESS Calm-agitated Sympathetic-unsympathetic Expected-unexpected.
III.	USUAL-UNUSUAL Passionate-dispassionate Peaceful-agitated (Fearless-fearful) (Merciful-merciless)	USUAL-UNUSUAL Expected-unexpected
IV	TIMID-BRAVE Agreeable-disagreeable Passionate-dispassionate (Usual-unusual) (Expected-unexpected) (Sexual-frigid) (Sympathetic-unsympathetic)	EXPECTED-UNEXPECTED Usual-unusual Neither-Dreadful-Dreadless Attractive-repulsive
V	SOBER-FUNNY Valourous-Cowardly Bold-frightened (Manly-womanly) (Passionate-dispassionate) (Calm-furious) (Usual-unusual) (Sympathetic-unsympathetic) (Timid-brave)	BOLD-FRIGHTENED Agreeable-disagreeable Frigid-sexual Sober-funny Timid-brave Unsurprising-surprising
VI	PASSIONATE-DISPASSIONATE Dull-humorous Disturbed-undisturbed (Peaceful-agitated) (Gentle-angry) (Calm-furious)	PEACEFUL-AGITATED Grave-amusing Gentle-angry Disturbed-undisturbed Feminine-masculine

RESPONSES OF YOUNG INDIANS TO RAGAS

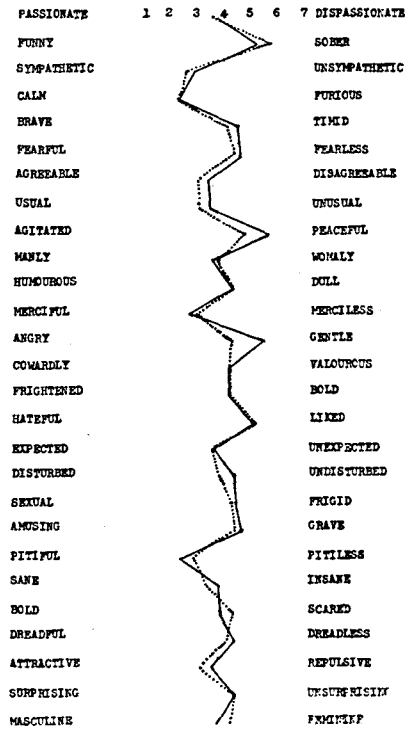


Fig. 2. The profile of *raga Bhairav*. Solid line—young and broken line—old. Quantification : 1 & 7=Extremely, 2 & 6=Quite, 3 & 5=Slightly, 4=Both or Neither. Both from Table 4 and the Profile, it will be seen that the scatter is not much and most of the values of the means tend towards the neutral 4. Which could mean that the *raga Bhairav* (and we may speculate that Indian music as a whole) does not arouse any exhibitive emotions; in other words, this music is not hysterical. Again, leaving out all quantities between 3 and 5, we see that the profile of the *raga* emerges more clearly, as shown here:

Younger generation

Older generation

Sober—5.2	5.7
Sympathetic—2.9	2.6
Calm—2.3	2.3
Agreeable	3.0
Peaceful—5.6	
Merciful—2.7	2.9
Gentle—5.3	5.3
Liked—5.0	5.1
Pitiful—2.3	2.8
Attractive	3.0

The picture of the *raga* is unbelievably common to both the young and the old; what is more it is extremely like the intuitive concept of this *raga* in our tradition. It has the following *rasa*: it is liked, *karuna* and *santa*.

TABLE 7

Comparison of intended and created moods of RAGA BHAIKAV on a group of respondents : younger and older generations

Intended mood	Created mood		
	Younger generation	Older generation	Pooled
Placid mood of a <i>yogi</i> or ascetic (Stoke & Khandalwala, 1953) Awesome grandeur, horror, fright but also a certain mood of melancholy and even tender adoration (Subba Rao, 1956) Tender, calm, confident strong, self assertive (Danielou, 1968)	Heroic Sombre Merciful Likeable	Passionless Calm Familiar Bold Detached	Empathy Compassionate but vital Positive, Courageous Tranquil

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